

A BREAKAWAY SUPPORT POST FOR
HIGHWAY GUARDRAIL END TREATMENTS

946 717 ABSTRACT OF THE DISCLOSURE

5 A breakaway support post is provided for a highway
guardrail system to enhance the safety of a vehicle
impacting with either the rail face of the associated
guardrail or one end of the guardrail facing oncoming
traffic. For some applications, the breakaway support
post may be formed from a steel I-beam with one or more
elongated slots formed intermediate the ends of the steel
I-beam. The slots are preferably formed in the flanges
10 of the I-beam which are in turn aligned generally
parallel with the associated guardrail. For other
applications, a breakaway support post may have an upper
and a lower portion with a rotatable coupling assembly
disposed therebetween. A shear pin or other releasing
15 mechanism is preferably provided to maintain the upper
and lower portions generally aligned with each other
prior to the impact of a vehicle with one end of the
associated guardrail. The coupling assembly is
preferably oriented relative to the guardrail such that
20 the breakaway support post will provide sufficient
support during a rail face impact to direct the impacting
vehicle back onto the associated roadway. For still
other applications, a breakaway support post may have an
upper and a lower portion with a frangible connection
25 disposed therebetween. The frangible connection is
preferably oriented such that the breakaway support post
will provide sufficient support during a rail face impact
and release the upper portion from the lower position
when a vehicle impacts one end of the associated
30 guardrail.